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Fig. 1A

Fluorescent Dyes

	Absorbance Maxima	Emission Maxima
Fluorescein	494nm	525nm
Tetrachloro fluorescein	521 nm	536nm
TAMRA	565nm	580nm

Fig. 1B

Cleaved Fragments:

Fig. 1C

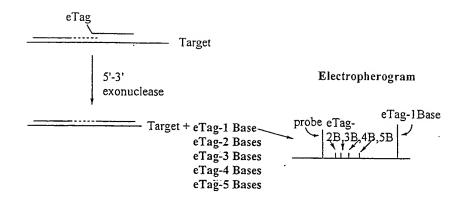


Fig. 3A

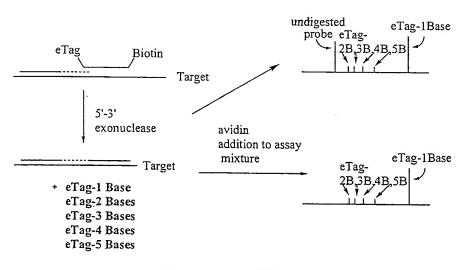


Fig. 3B

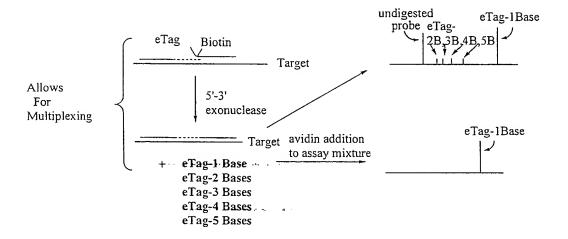


Fig. 3C

Fig. 3D

Fig. 4

e-tag Reporter	Elution Time on CE, min	Mass
HO O O O O O O O O O O O O O O O O O O	6.4	778
CI CI COOH OHO OHO OHO OHO OHO OHO OHO	H ₂ N 7.1	925
CI CI OH NH2 O-P-O-ON O CI CI O-P-ON O CI CI O-	7.3	901
CI CI COOH OH OH OH OH OH OH OH OH OH	7.7	994
CI CI COOH NH OME OME O-OH	8.0	985
CI COOH NH ₂ OH OH	9:25	961

Fig. 5

e-tag Reporter	Charge	Elution Time, min
O _√ Fluorescein		
HN () O-P-C ₃ C ₃ C ₃ C ₃ C ₃ -	-8	12.1*
O _√ Fluorescein		
$ \begin{array}{c} $	C ₆ C ₆ — -9	12.7
HN (-) O-P-O-C6C6C6C6	C ₆ —8	12.8
O Flúorescein	do	
O Flúorescein HN $O - P - O - C_6 C_6 C_6 C_6$	-7	13.1
O Fluorescein HN () O-P-O-C ₃ C ₃ C ₉ —		
O-P-O-C ₃ C ₃ C ₉ _	-6	13.0
O_Fluorescein		
O Fluorescein HN O	-6	13.4
O Fluorescein	dC	
OF Eluorescein HN OP-O-C ₃ C ₃ OF Fluorescein HN OP-O-C ₃ C ₉ OF-O-C ₃ C	-5	12.8*
O Fluorescein	C	•
HN (O-P-O-C3C9	-5	13.2*
O _s Fluorescein	С	
OFFluorescein HN (-5	14.8
O Eluorescein	C	
O Fluorescein O HN () O P-O TTTdC	-6	17.3
		17.5
O Fluorescein		
() O-P-O-TTdC	-5"	17.0
O Fluorescein		
HN () 0-P-0-C ₉	-4	15.2*
O Fluorescein		<u> </u>
OFFluorescein HN 5 O-P-O-TTdC 5 O-P-O-C ₉ OFfluorescein HN 5 O-P-O-C ₉ OFfluorescein HN 6 O-P-O-TdC O-P-O-TdC	-4 ·····	16.5

Fig. 6

Fig. 7

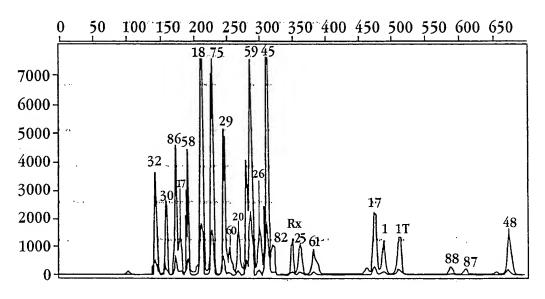


Fig. 8

ROOC COOR N

N

N

N

N

N

N

N

N

N

OCE

$$M = \text{mobility modifier}$$
 $X = \text{halogen}$

N

OCE

Fig. 9

Fig. 10

HO CON DCC,
$$CH_2Cl_2$$
HOOC H₂N † nOH
DMF HO NO DCC, CH_2Cl_2

Fig. 11

$$M = Mobility Modifier$$

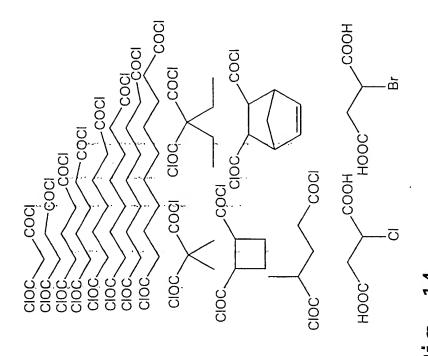
$$M =$$

Fig. 12

HO CIOC—R-COCI

$$H_2N$$
 H_2O
 H_2O

Fig. 13



H₂N H₂N OH OH H₂N OH OH H₂N OH

Fig. 15

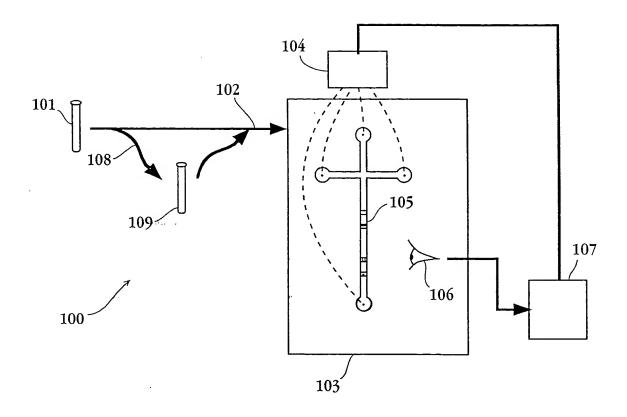


Fig. 16

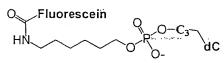
Fig. 17A

Fig. 17B

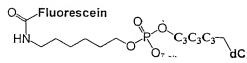
ACLA025

O Fluorescein HN C- dC

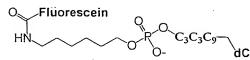
ACLA026



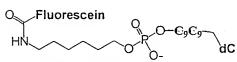
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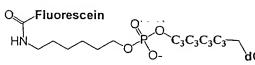
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ACLA029

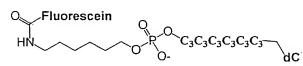


ACLA030



ACLA031

ACLA032



ACLA033

ACLA034

ACLA035

ACLA036

Fig. 17C

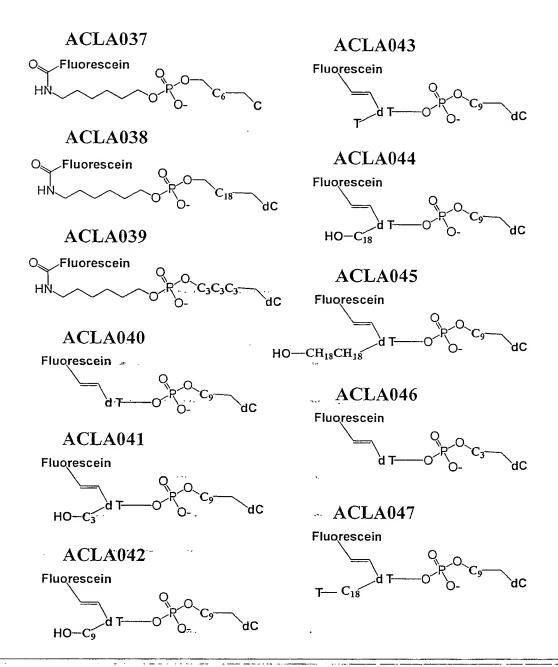
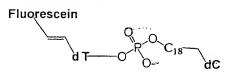


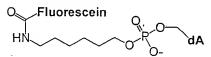
Fig. 17D

ACLA048

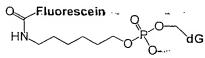
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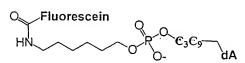
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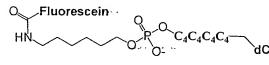
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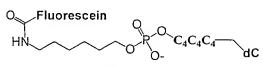
ACLA052



ACLA053



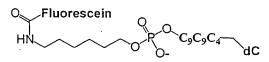
ACLA054



ACLA055

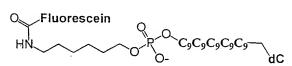
O Fluorescein
$$C_9C_4$$
 C_9C_4 C_9C_4

ACLA056



ACLA057

ACLA058



ACLA059

Fig. 17E

Fig. 17F

Fig. 17G

Fig. 17H

ACLA089

$$C_3C_3TC_3$$
 d T—O O dC

ACLA090

Fluorescein

$$C_3C_3C_3TC_3$$
 d T—O O dC

ACLA091

Fluorescein

ACLA092

Fluorescein

ACLA093

- Fluorescein

ACLA094

Fluorescein

$$C_{12}$$
 C_{12} d T C_{9} d C_{9}

ACLA095

Fluorescein

ACLA096

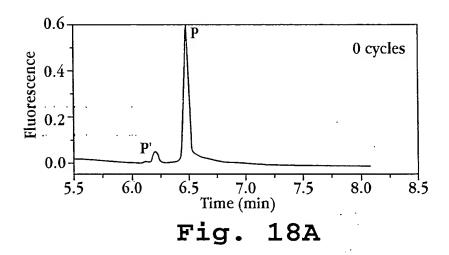
∠Fluorescein

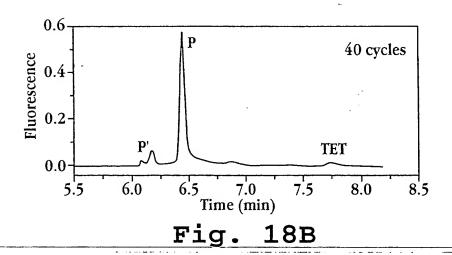
ACLA097

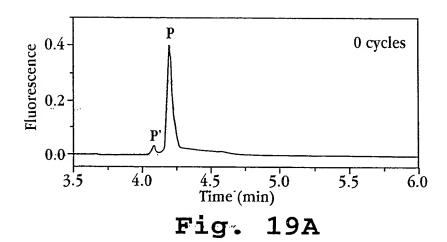
$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

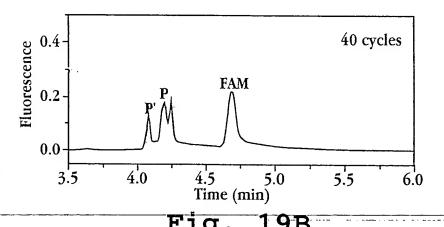
Fig. 17I

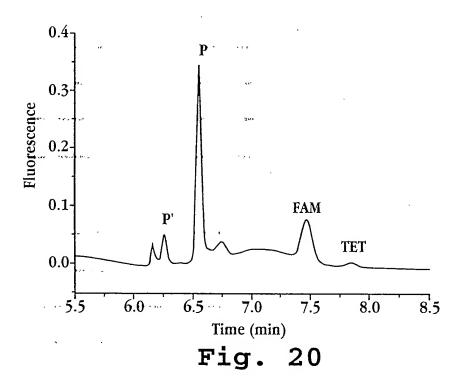
Fig. 17J











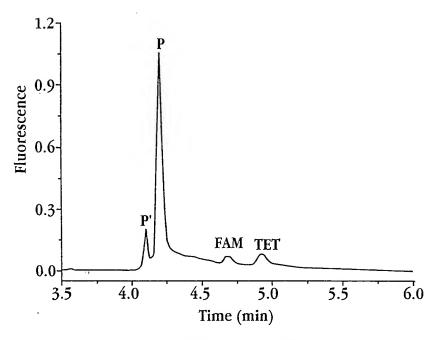


Fig. 21

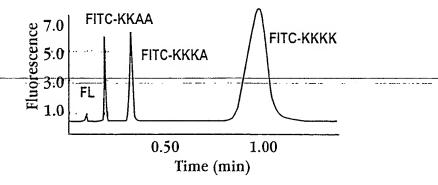


Fig. 22

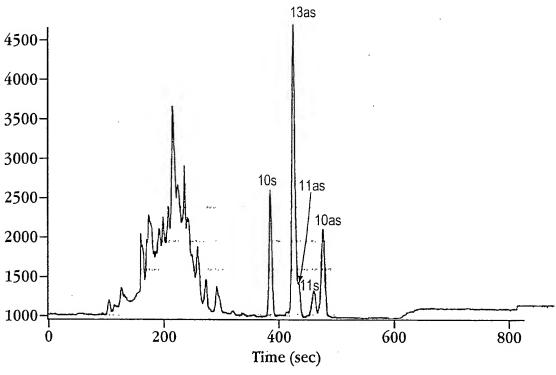
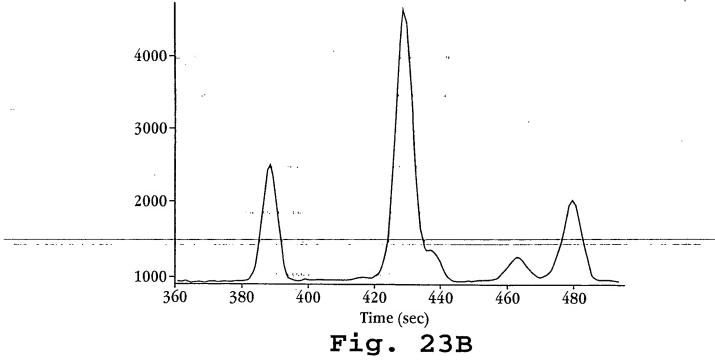


Fig. 23A



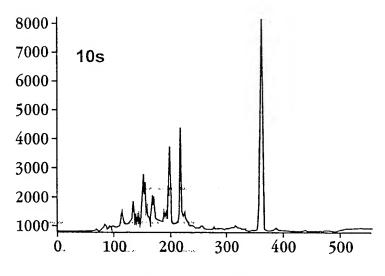


Fig. 23C

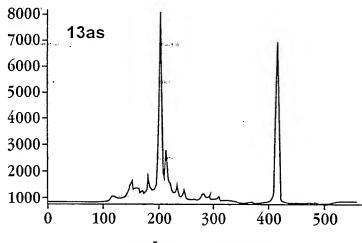
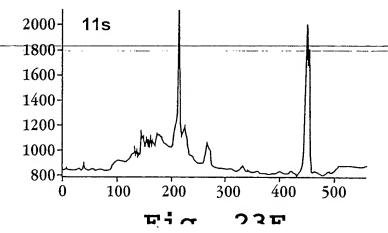


Fig. 23D



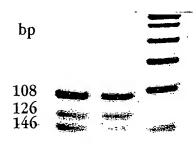


Fig. 23F

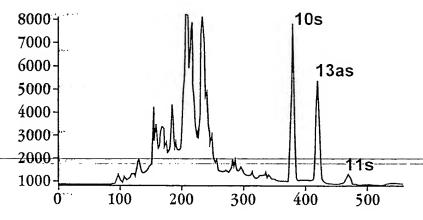


Fig. 23G

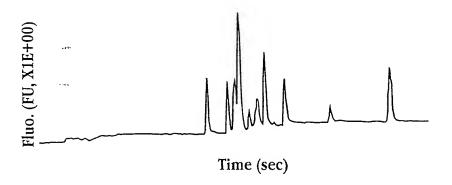


Fig. 24

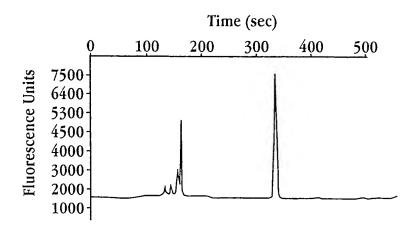


Fig. 25A

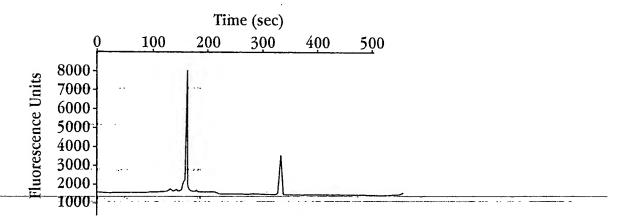


Fig. 25B

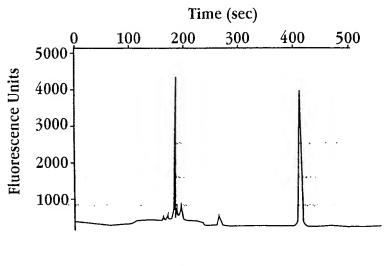


Fig. 25C

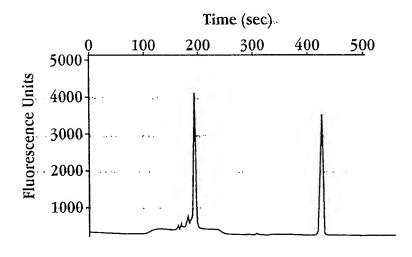


Fig. 25D

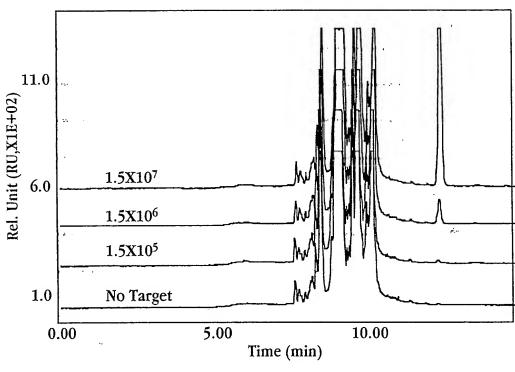


Fig. 26

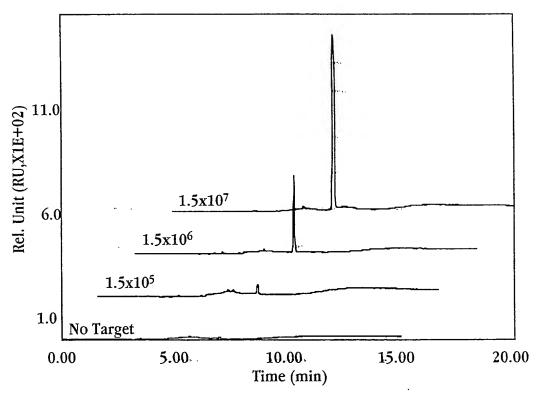


Fig. 27

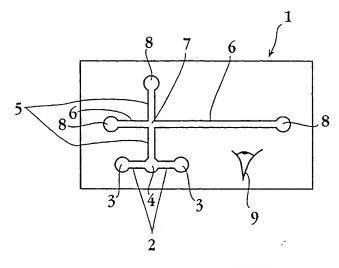


Fig. 28A

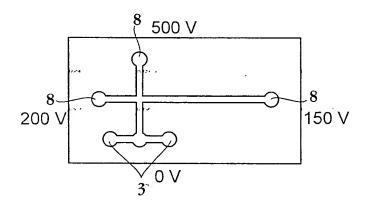


Fig. 28B

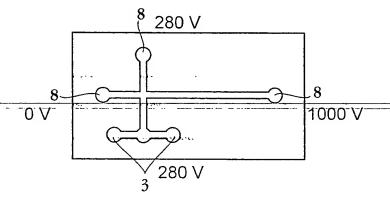


Fig. 28C

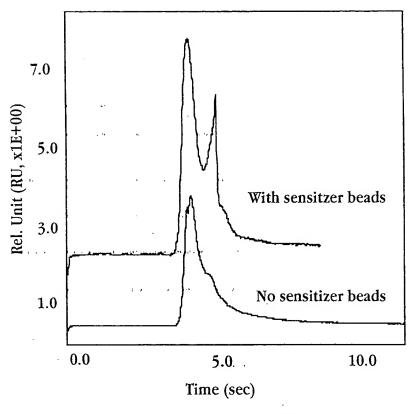


Fig. 29

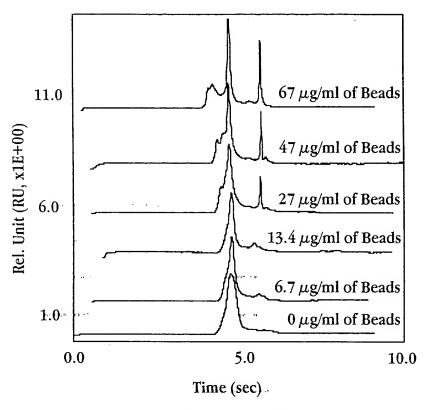


Fig. 30

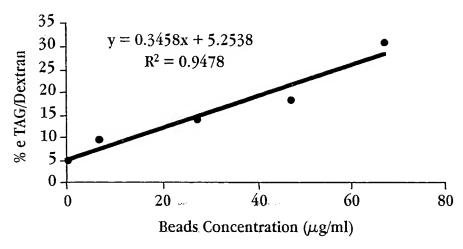


Fig. 31

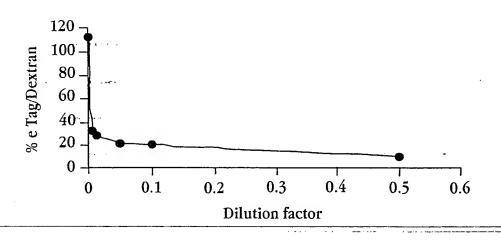
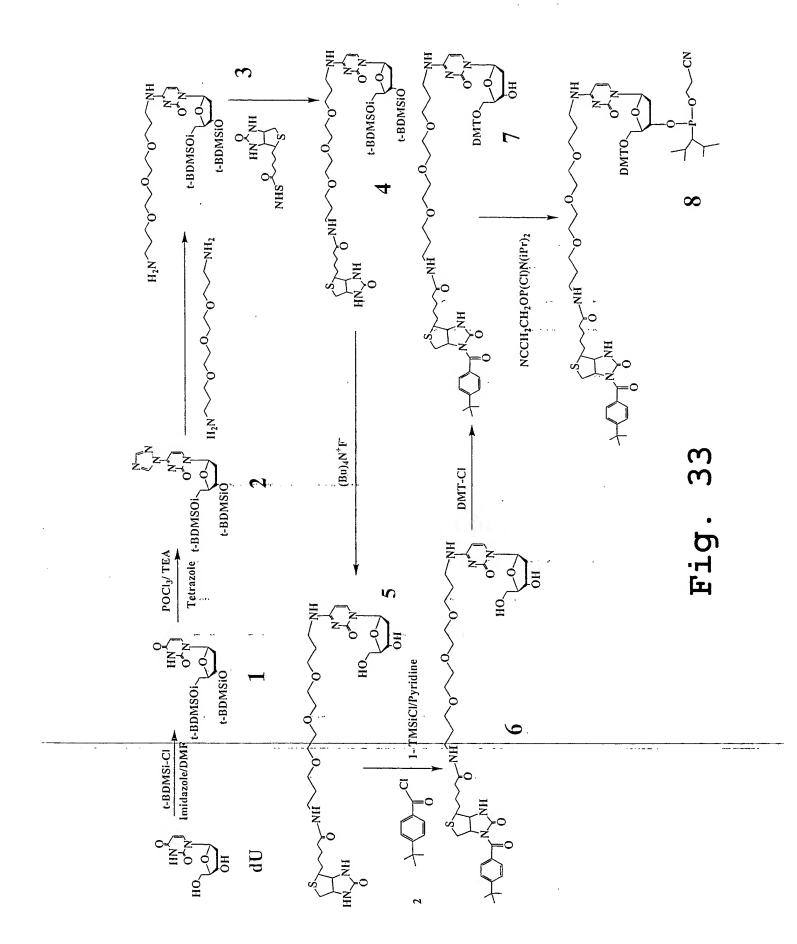


Fig. 32



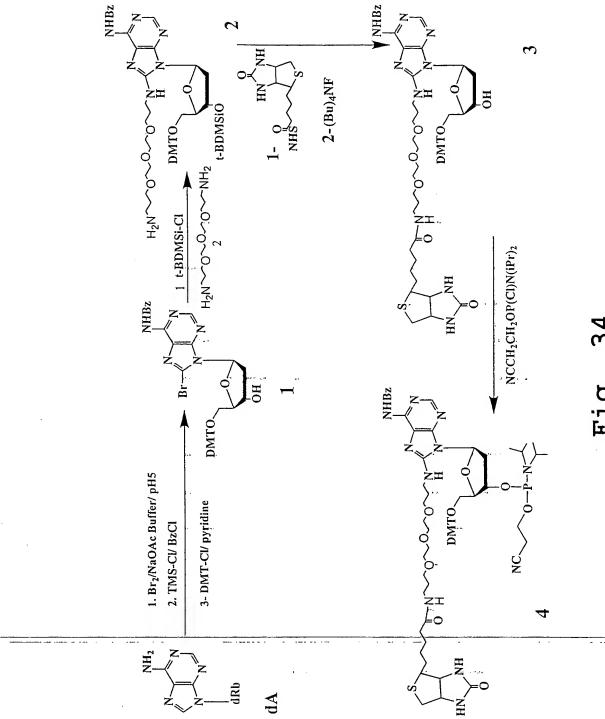


Fig.